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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/519,939	01/25/2005	Paulus Pieter De Wit	122235	5044
RALPH J. MAN	7590 06/18/2007 NCINI	EXAMINER		
AKZO NOBEL INC. 7 LIVINGSTONE AVENUE NEW YORK, NY 10522-3408			WHITE, EVERETT NMN	
			ART UNIT	PAPER NUMBER
• · · • · · · · · · · · · · · · · · · ·			1623	
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			06/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/519,939	DE WIT, PAULUS PIETER			
Office Action Summary	Examiner	Art Unit			
	Everett White	1623			
The MAILING DATE of this communication appeariod for Reply	opears on the cover sheet with the o	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perioderiule to reply within the set or extended period for reply will, by status Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tild d will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. mely filed I the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on  2a) ☐ This action is FINAL. 2b) ☐ Th  3) ☐ Since this application is in condition for allow closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr				
Disposition of Claims					
4)  Claim(s) 1-12 is/are pending in the applicatio 4a) Of the above claim(s) is/are withdrest is/are allowed.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-12 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/	awn from consideration.				
Application Papers					
9) The specification is objected to by the Examir 10) The drawing(s) filed on is/are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct of the oath or declaration is objected to by the Examir	ccepted or b) objected to by the edrawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob-	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)					
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date 4/28/2005.</li> </ol>	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate			

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilbig et al (US Patent No. 5,708,162).

Applicant claims a process for preparing a solution of a polysaccharide or polysaccharide ether having a viscosity of 1,000 mPa.s or less comprising adding to an aqueous medium a polysaccharide or polysaccharide ether and an alkaline depolymerization agent, characterized in that the polysaccharide or polysaccharide ether and the alkaline depolymerization agent are added simultaneously to the aqueous medium.

The Hilbig et al patent discloses processes for the preparation of low molecular weight polysaccharide ethers wherein Example 2 of the Hilbig et al patent discloses preparation of a carboxymethylcelllulose that involve an initial step that prepares a cellulose ether solution, wherein alkali treatment of the solution is carried out using sodium hydroxide (see step 2.1). Oxidative degradation of the cellulose ether is performed in the 2<sup>nd</sup> step (step 2.2), which involves the sodium perborate tetrehydrate being shaken into the reaction slurry in solid form. The carboxymethylcellulose and sodium perborate of the Hilbig et al patent anticipate the same as disclosed in instant Claims 3, 5 and 6 and the sodium hydroxide used in Example 2 of the Hilbig et al patent anticipate the sodium hydroxide disclosed in instant Claim 4. Example 2 of the Hilbig et al discloses the depolymerized carboxymethylcellulose as having a viscosity of 19 mPa.s (see column 9, lines 34 and 35), which anticipate the viscosity of 1000 mPa.s or less disclosed in instant Claim 1.

It is noted that the instant specification on page 7, lines 19-27, discloses that the polysaccharide or polysaccharide ether and the alkaline depolymerization agent are

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added simultaneously to the aqueous medium in order to prevent decomposition of the depolymerization agent before it is able to depolymerize the polymer, which reduces the efficiency of the depolymerization reaction. Example 2 of the Hilbig et al patent discloses adding the sodium perborate into the reaction slurry containing the carboxymethylcellulose in solid form, which would avoid the depolymerization agent being decomposed before it is able to depolymerize the polymer. Hence, this procedure disclosed in Example 2 of the Hilbig et al patent anticipate the simultaneously addition of the polysaccharide ether and the alkaline depolymerization agent to the aqueous medium as disclosed in instant Claim 1 since the procedure solves the problem of premature decomposition of the depolymerization agent.

3. Claims 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsunaga et al (US Patent No. 4,071,462).

Applicant claims a solid composition comprising a polysaccharide ether and an alkaline depolymerization agent characterized in that the alkaline depolymerization agent is selected from the group consisting of sodium percarbonate, carbamide peroxide in combination with a base, sodium persulfate in combination with a base, 3-chloroperoxybenzoic acid (m-CPBA) in combination with a base, and mixtures thereof.

The Matsunaga et al patent discloses a dry granulated product in Example 1 (see column 4, lines 55-62) comprising sodium percarbonate powder and carboxymethyl cellulose, which anticipate instant Claims 7-12 when the composition thereof comprises sodium percarbonate and carboxymethyl cellulose.

## Summary

4. All the pending claims are rejected.

## Examiner's Telephone Number, Fax Number, and Other Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Everett White whose telephone number is 571-272-0660. The examiner can normally be reached on 9:30 to 6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia A. Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

E. White

Shaojia A. Jiang

Supervisory Primary Examiner Technology Center 1600